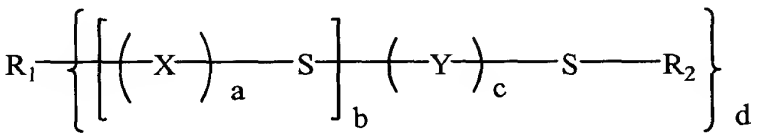
WHAT IS CLAIMED IS:

1. A method for producing a catalyst composition which catalyzes the formation of bisphenols from aromatic hydroxy compounds and carbonyl containing compounds, said method comprising the step of attaching a poly-sulfur mercaptan promoter component to a solid acid support component comprising a protic acid functionality, said poly-sulfur mercaptan promoter component having the following structure (I),



(I)

wherein R_1 is a functionality selected from the group consisting of a positively charged ammonium functionality, a positively charged guanidinium functionality and a positively charged phosphonium functionality;

wherein a is between about 0 and about 11;

wherein b is between about 1 and about 11;

wherein c is between about 1 and about 11;

wherein d is between about 1 and about 5;

wherein X is a linking functionality which is one member selected from the group consisting of a linear aliphatic chain comprising between about 1 and about 11 carbon atoms, a cyclic aliphatic ring comprising at least 5 carbon atoms, a cyclic aromatic ring comprising at least 6 carbon atoms, a cyclic aliphatic heterocycle comprising at least 3 carbon atoms, and a cyclic aromatic heterocycle comprising at least 3 carbon atoms;

wherein Y is a linking functionality which is one member selected from the group consisting of a linear aliphatic chain comprising between about 1 and about 11

carbon atoms, a cyclic aliphatic ring comprising at least 5 carbon atoms, a cyclic aromatic ring comprising at least 6 carbon atoms, a cyclic aliphatic heterocycle comprising at least 3 carbon atoms, and a cyclic aromatic heterocycle comprising at least 3 carbon atoms; and

wherein R_2 is one member selected from the group consisting of a hydrogen, a secondary aliphatic functionality, a tertiary aliphatic functionality, an ester functionality, a carbonate functionality, and a benzyl functionality which is attached via the benzylic methylene carbon.

2. The method of claim 1, wherein said tertiary aliphatic functionality is one member selected from the group consisting of a branched aliphatic functionality, and a cyclic aliphatic functionality.

3. The method of claim 1, wherein said R_2 functionality is one member selected from the group consisting of an isopropyl functionality, an isobutyl functionality, a tertiary butyl functionality, a tertiary amyl functionality, a cyclopentyl functionality, a benzyl, a 4-methoxybenzyl functionality, a 1-methylcyclohexyl functionality, and a cyclohexyl functionality.

4. The method of claim 1, wherein said ester functionality is one member selected from the group consisting of an acetate functionality, a propionate functionality, and a benzoate functionality.

5. The method of claim 1, wherein said carbonate functionality is one member selected from the group consisting of an alkyl carbonate functionality, and an aromatic carbonate functionality.

6. The method of claim 1, wherein the bisphenol which is being formed is 4,4'-isopropylidenediphenol.

7. The method of claim 1, wherein the carbonyl containing compound is a ketone or an aldehyde.

8. The method of claim 1, wherein the aromatic hydroxy compound is phenol, and the carbonyl containing compound is acetone.

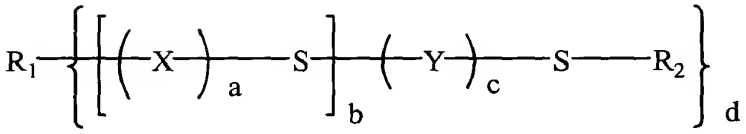
9. The method of claim 1, wherein the attachment step is performed in an aqueous solution comprising water.

10. The method of claim 1, wherein said solid acid comprises at least one member selected from the group consisting of polystyrene, a zeolite, and silica.

11. The method of claim 1, wherein said protic acid functionality comprises at least one member selected from the group consisting of a sulfonic acid functionality, a phosphonic acid functionality, and a carboxylic acid functionality.

12. The method of claim 1, wherein the linking functionality X, is the same as the linking functionality Y.

13. A method for forming bisphenols, comprising the step of reacting an aromatic hydroxy compound with a carbonyl containing compound in the presence of a catalyst composition, said catalyst composition comprising a solid acid component and a poly-sulfur mercaptan promoter component having the following structure (I),



(I)

wherein R_1 is a functionality selected from the group consisting of a positively charged ammonium functionality, a positively charged guanidinium functionality and a positively charged phosphonium functionality;

wherein a is between about 0 and about 11;

wherein b is between about 1 and about 11;

wherein c is between about 1 and about 11;

wherein d is between about 1 and about 5;

wherein X is a linking functionality which is one member selected from the group consisting of a linear aliphatic chain comprising between about 1 and about 11 carbon atoms, a cyclic aliphatic ring comprising at least 5 carbon atoms, a cyclic aromatic ring comprising at least 6 carbon atoms, a cyclic aliphatic heterocycle comprising at least 3 carbon atoms, and a cyclic aromatic heterocycle comprising at least 3 carbon atoms;

wherein Y is a linking functionality which is one member selected from the group consisting of a linear aliphatic chain comprising between about 1 and about 11 carbon atoms, a cyclic aliphatic ring comprising at least 5 carbon atoms, a cyclic aromatic ring comprising at least 6 carbon atoms, a cyclic aliphatic heterocycle

comprising at least 3 carbon atoms, and a cyclic aromatic heterocycle comprising at least 3 carbon atoms; and

wherein R_2 is one member selected from the group consisting of a hydrogen, a secondary aliphatic functionality, a tertiary aliphatic functionality, an ester functionality, a carbonate functionality, and a benzyl functionality which is attached via the benzylic methylene carbon.

14. The method of claim 13, wherein said tertiary aliphatic functionality is one member selected from the group consisting of a branched aliphatic functionality, and a cyclic aliphatic functionality.

15. The method of claim 13, wherein said R_2 is one member selected from the group consisting of a, an isopropyl functionality, an isobutyl functionality, a tertiary butyl functionality, a tertiary amyl functionality, a cyclopentyl functionality, a benzyl, a 4-methoxybenzyl, a 1-methylcyclohexyl functionality, and a cyclohexyl functionality.

16. The method of claim 13, wherein said ester functionality is one member selected from the group consisting of an acetate functionality, a propionate functionality, and a benzoate functionality.

17. The method of claim 13, wherein said carbonate functionality is one member selected from the group consisting of an alkyl carbonate functionality, and an aromatic carbonate functionality.

18. The method of claim 13, wherein the bisphenol which is being formed is 4,4'-isopropylidenediphenol.

19. The method of claim 13 wherein the aromatic hydroxy compound is phenol.

20. The method of claim 13, wherein the carbonyl containing compound is a ketone or an aldehyde.

21. The method of claim 20 wherein the ketone is acetone.

22. The method of claim 13, wherein said solid acid comprises at least one member selected from the group consisting of polystyrene, a zeolite, and silica.

23. The method of claim 13, wherein said solid acid is a sulfonic acid functionalized polymeric resin.

24. The method of claim 23, wherein said polymeric resin further comprises divinylbenzene.

25. The method of claim 24, wherein the amount of divnylbenzene is up to about 12 percent of the total weight of the polymeric resin.

26. The method of claim 13 wherein said solid acid component comprises at least one member selected from the group consisting of a sulfonic acid functionality, a phosphonic acid functionality, and a carboxylic acid functionality.

27. The method of claim 13, wherein the linking functionality X, is the same as the linking functionality Y.